THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, MAY 9, 1835.

Seasonable Hints for May.

As much team work is to be done during this month, working cattle and horses should be plentifully fed, and not turned to pasture early, but fed on hay, meal, &c. until grass become large enough to afford copious feed. One team in good condition will do much more work than two half starved ones.

Milch Cows

Often occasion a continual loss to their owner, by not affording a return in butter and milk equal to their expense of keeping. In order to avoid this, the inquiry should be made, "How much milk ought a cow to give to be worth her keeping?" Most farmers will not find much difficulty in answering this question. Let it be ascertained by direct trial, how much milk, butter, &c. a cow will yield during the year, and place the value of this on one side of the account; then determine the expense of keeping through the year, together with that of the labor of feeding, milking, making butter, &c. and place this on the other side; and the farmer will discover at once, whether he is pursuing a gaining or a losing business by keeping such cows as he has. This method will also show in a strong light, the great advantage of keeping good milkers. As an instance, suppose a cow will yield, on an average, eight quarts of milk a day, and that the milking season continues nine months; this would give 2160 quarts. Now suppose ten quarts of milk will produce one pound of butter, and that the skim-milk and buttermilk are worth three dollars a year. The yearly produce of such a cow will therefore be

216 lbs. of butter at 12½ cts per lb.....	$27
Skim-milk, &c.....	3
	$30

Nothing is said of the value of the calf, as all the milk is taken into account.

If the cost of keeping and attendant expenses be twenty-five dollars, the clear profit will be *five dollars.*

But suppose a cow instead of giving eight quarts, gives on an average ten quarts a day, and the expense being the same, (the increased labor being compensated by the increased quantity of milk,) the clear profit, instead of being *five dollars*, will be found by a similar calculation, to be *eleven dollars and three quarters.* This shows the great additional profit even where the increase of milk is small. If the cow give only six quarts a day, a similar method would show an actual yearly loss of four dollars and seventy-five cents.

Calves

Intended for the butcher should be suckled twice a day at *regular* hours, and with a regularly increasing quantity of milk as the time approaches for killing. They should never be allowed to overcharge their stomachs at one time, nor to suffer from want at another. Those intended for rearing will be finest where they are reared from the teat; and this mode also saves the labor of milking. But new milk is valuable; and very fine calves may, with care, be raised by diminishing, very gradually, the quantity sucked, and substituting skimmed milk thickened with meal.

Corn

Is commonly cultivated in hills; but a greater number of plants may be raised without crowding them, when they are planted in drills or rows, as they are thus more evenly distributed over the ground. Plants may stand in rows, six inches apart, without being too near together, which is a greater number than could grow without crowding when planted in hills on the same surface of ground. The labor required to cultivate corn in drills cannot much exceed the common mode, where the ground is previously well prepared, and the *rows are made straight and even*, so as to allow a cultivator to pass as near them as possible. When planted in double drills, the advantage becomes still greater; and by planting in triple drills, thus,

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I. & M. Pratt of Madison county, N. Y. raised 173 bushels to the acre; and say they have no doubt of being able to obtain 200 bushels with a favorable season and proper soil. The drills, as above represented, were 18 inches wide, and five feet asunder, from center to center.

In order to protect corn from crows, blackbirds, and fowls, the seed should be immersed in heated tar and then rolled in air-slacked lime or plaster. This method is completely effectual.

It is in general useful to plant about twice as many seeds as it is desired should grow, and the plants may be easily thinned out afterwards, leaving the thriftiest to remain. I. & M. Pratt, instead of planting six quarts to the acre as is commonly the case, planted four bushels to the acre, and pulled up all but the thriftiest plants; and no stalk produced less than three ears.

Potatoes, when planted in drills, derive all the advantages of corn, from this mode of culture; with the additional ones of being more easily cultivated, and of being more easily ploughed out of the ground when the crop is gathered. The large round flesh colored potatoe is best adapted for feeding stock, on account of its size and productiveness, and the Mercer and Kidney for the table. Potatoes on a dry sandy soil are not so good as those which grow on a deep and rather moist soil, as the latter prevents more effectually their exposure to the sun.

As the method of cultivating corn and potatoes in drills is not generally adopted, let every farmer who reads this, try the experiment of raising crops according to the different modes here recommended, and keep account of the expense and proceeds. Experiments should be *accurate*, or else they will be of little use. Measure the seed and product, and record the precise amount of labor. But in deciding between new and old modes of culture, one thing must not be forgotten,—that new modes may *now* require more labor and expense merely on account of the want of skill and experience which is only to be acquired by practice.

HINTS ON GARDENING FOR MAY.

The Fruit Garden.

Farmers who are fond of fruit, and who *expect to have it*, must devote a day or two during this month to the care of their fruit trees.

FRUIT TREES,

When not in cultivated fields, should have the soil spaded and loosened about the roots to a distance of two or three feet around each tree; and for young and newly transplanted trees especially, the surrounding soil should be kept mellow at the surface during the summer, as it prevents evaporation from the ground, and keeps it moist below the surface and about the roots, and will render them more thrifty, and often prevent their being killed by drouth much more effectually than by watering, which generally instead of benefiting, actually injures them by causing the soil to bake and become hard around them.

EGGS AND TORPID INSECTS

In the cracks of bark may be effectually destroyed by washing the trunks and larger branches with strong ley, potash dissolved in water, or with lime. Soap suds have also been recommended, but they are hardly caustic enough to do the business thoroughly.

PEACH AND NECTARINE TREES

Should now be examined at the roots for the purpose of removing the grubs, which remain dormant near the surface during winter, and should be destroyed in the early part of the season, before they change into the perfect insect and multiply their numbers. Various applications have been recommended for their destruction, but few or none of them can be of much value, except as preventives for trees already uninjured. The best method of destroying them is to trace them out in their holes, which is easily done, as they are always in the bark and never penetrate the wood. By following up all the holes they have eaten, to the end, we may be certain when we have cleared the tree.

NECTARINES, PLUMS, AND APRICOTS,

Will need attention in the latter part of this month in order to prevent the depredations of the curculio. These insects puncture the young fruit and lay their eggs, whence proceeds the worm which causes the young fruit to drop. If a sufficient number of hogs or geese are suffered to run about the tree, they eat the fallen fruit and thus destroy the worms, so that in the next sea-

son, the fruit will escape their attacks. This method when persevered in has been found completely efficacious. But it is desired to save the *present* year's crop. To effect this, as soon as the young fruit is as large as a small chestnut, broad white cloths are to be spread under the tree, which is then to be jarred by striking it, when the insect immediately drops upon the cloth, and is destroyed by the thumb and finger. This insect is scarcely as large as a common house fly, is of nearly the same color, and has a long slender neck and head, so as to give it some resemblance in shape to a bottle. To an inexperienced eye, it is with difficulty distinguished from dead blossoms, lying upon the cloth. This operation should be continued twice a day till no more are found on the trees.

Those who are transplanting trees of smooth stone fruit, should not forget to place them so as to be best capable of protection from the curculio. When a number are transplanted, they should stand separate from other fruit trees, so that hogs and geese may be confined with them. Where single trees are set out, they should, if possible, be placed near the most frequented places, in order that people by constantly passing may disturb and drive the insects away.

ORCHARD CATERPILLARS

Are now making their appearance, and may be destroyed more effectually and with much less labor now when they are small, than when they become large. An effectual way is to apply to them with a swab or brush, in cool mornings when they are in their nests, strong soap suds, brine, fish oil, lime, or what is still better, a strong decoction of tobacco. These applications are best when the caterpillars are small; when they become older, and the nests larger, perhaps it is more advantageous to use a pole furnished at its extremity with a cylindrical bristle brush, which when thrust into the nest and turned round, collects the entire web with its inmates, which are then readily destroyed. Or when the branches are not too thick and crowded, several leather straps about a foot long, attached to the end of a pole, serves to destroy them effectually by beating.

The Kitchen Garden.

ASPARAGUS BEDS

Should be made early in this month. To cultivate it in the best manner, dig a trench three feet wide, and two feet deep. If it be under the south side of the garden wall or fence, it will come forward earlier in the spring. Fill the trench to within about eight inches of the surface with manure occasionally attenuated with a layer of earth. Spread a thin layer of rich earth upon the top, and lay on the roots in their natural position, about nine inches apart, and fill up the remainder of the trench with rich mellow soil, so that the crown of the plants may be two or three inches below the surface. If roots cannot be had, procure seeds and plant them about an inch deep, by drawing parallel lines in the soil lengthwise with the bed nine inches apart, and afterwards lines across the bed at the same distance asunder, and then dropping the seed at the intersections and covering them with black mold. The bed should be kept free from weeds.

All the shoots in asparagus beds may be cut off till the middle of June without injuring the roots; but after that time they should be allowed to grow up to seed, otherwise the roots will be weakened. A plantation of Asparagus, with proper management, will continue productive many years.

TRANSPLANTING CABBAGES AND OTHER PLANTS

From hot-beds should be done when the ground is not *wet*; for, if worked in this state, it will be reduced to a sort of mortar, and be left hard and full of cracks when it becomes dry. The earth should be just so moist as to be capable of being finely pulverized, so that it may, when pressed about the roots, touch them in every part and lie close about them; and it should be freshly dug or stirred up just before the operation. Cabbages will live and thrive better when transplanted in a fine mellow and moderately moist soil, under a hot sun, than when placed in a *wet* soil during rainy weather. Much more indeed depends on the mode of the operation than on the state of the weather.

There are some plants, however, which are so tender and juicy, cucumbers and melons for instance, as to be scorched and absolutely destroyed in a hot sun. When this is the case, they must be *shaded* upon their removal, by sticking a broad shingle in the ground on the south side, or two shingles so as partly to inclose them, meeting at an angle on the south.

It has been strongly recommended to dip the roots of young plants as soon as they are taken from the ground, into a mixture of soil and water worked together to the consistency of soft mud. This, by adhering to the roots, prevents their becoming dry for several hours until they are transplanted.

Care should be taken that the end of the root is not *bent* when set in the ground, and also that plant be set as deeply as possible without burying the leaves.

MELONS, CUCUMBERS, AND SQUASHES,

Except where cultivated on the highest soils, should be planted on ridges, as follows. Dig trenches one or two feet deep, and fill them level with the surface with fresh manure. Then cover this with a rich sandy soil so as to form a ridge about one foot high and rounded on the top. Plant the seeds on this; and after they have come up and have become large enough to be beyond the power of insects, pull up as many plants as will leave but one to every two or three feet. The great error is planting them too thickly together. Cobbett says, "One plant will bring more weight than two, (if standing near each other,) two more than three, and so on till you come to fifty in a square foot; and then you will have no fruit at all!" Mounds are equally successful, and sometimes more convenient than ridges. Dr. Stephen Mosher, of Union Springs, succeeded remarkably, by covering a large heap, consisting of three loads of fresh stable manure, 6 or 8 inches thick with inverted sods, and then making four excavations 18 inches deep on the four sides of this mound, filling them with fine rich earth, and planting five or six watermelon seeds in each. The plants grew rapidly, and nearly covered four square rods which surrounded the mound, and produced at least one wagon load of melons. *One plant alone produced five melons which overrun twenty pounds each; one of them weighed twenty-five pounds.** One great advantage of this mode of culture is, that the soil never becomes too wet nor too dry, the rain passing directly through the soil into the manure, where it is retained to moisten the soil when the weather becomes dry.

STRIPED BUGS,

So injurious to melons and squashes, are best destroyed by the thumb and finger; going over the plants two or three times a day, if persevered in a week or two will effectually preserve them.

A correspondent of the Genesee Farmer, of June 1831, says, "I have found a perfect and never failing remedy in the application of a strong solution of *red pepper*. Break and boil the pods and apply the liquor with a small handful of grass. One single application has always succeeded with me.

Judge Buel's mode of protecting these, and all garden plants where protection is necessasy, is to cover a simple square wooden frame of convenient size with cheap millinet, and then place it over the plant, the sharp points of the frame being pressed into the soil, so as completely to exclude winged insects, and worms which crawl upon the surface. As soon as the season of danger is past, the millinet is taken off, washed, and preserved for another season.

Mangel Wurtzel or Field Beet.

A few remarks on the culture of this crop, now the season has arrived for commencing it, may not be unacceptable.

THE SOIL

Is best when a clayey loam; but any soil if ploughed deep and well manured will produce good crops, as the principal requisite is depth and fertility.

THE SOWING

Should be done in the early part of the present month, although it is frequently performed later. Where the ground is very moist it should be sown upon ridges; but in ordinary cases, it succeeds best when planted in drills without ridging. T. & H. Little, of Newbury, Mass. who raised upwards of thirty-three tons to one acre, prepared the ground and sowed in the following manner:—After one deep ploughing, the ground was furrowed two and a half feet apart, and the manure put into the furrows, and covered with the plough; a roller was then passed on the top of the ridge thus formed, to pulverize the lumps, level the surface, and press the soil and manure together. The seed were then dibbled with the finger over the manure, about six or eight inches apart. John Hare Powel sowed his crop thus:—"The holes for the seeds were made by a wheel, containing pegs in its circumference, which penetrated the ground about an inch, leaving intervals of four inches; the rows were made two feet asunder; two capsules [or berries] were dropped in each hole; the wheel of a common barrow was then passed over them, thus compressing the earth, and leaving a slight rut for the retention of moisture."

THE QUANTITY OF SEED

Per acre should be about four pounds; for although this is a large allowance, the expense is

* Gen. Far. vol. 4, p. 137.

small when compared with the insurance of an even crop. Great care should be taken that the seed of the common red and white beet is not mixed with it. Unless the ground be very moist, the seed, before sowing, should be soaked about 18 hours in soft water. After the plants have come up, they should be thinned to about eight inches distance from each other in the rows.

THE AFTER CULTURE

Consists principally in a free use of the cultivator, and in keeping the land perfectly clear of weeds. Col. Powel ascribes his success in the culture of this crop, to deep and thorough ploughing; to the use of cultivators, which complete the production of fine tilth; to the destruction of weeds on their first appearance; to leaving the smallest space upon which a horse can walk between the rows; and above all, *to planting the seeds of a proper kind upon a surface which is kept perfectly flat.* Gideon B. Smith of Baltimore, in 1832, planted one-sixth of an acre which had been intended for early corn, and had been manured the previous year. The seed were sown in drills two feet asunder, and eight inches apart in the drills, and covered as corn. When the plants were up, a weeding hoe was passed over the field, and afterwards a small plough run through it twice, clearing out the weeds with a hoe. This was all the cultivation it had; and the whole labor, including the original preparation of the ground, did not exceed two full days work for one man. The crop was upwards of seventy five bushels; and might have been much larger, as there were many vacant places of six or eight feet length in the rows; and other places where the roots were injured by being crowded. The soil was a fair medium mold, a mixture of clay, sand, and vegetable matter.*

THE PRODUCE PER ACRE,

Under ordinary culture, may be estimated at from six hundred to a thousand bushels. Where however the ground is ploughed very deep, well manured, and well cultivated, much larger crops have been obtained, of which a few instances are here given.

Gideon Foster, of Charleston, Middlesex county, Mass. raised forty-three tons to the acre.

The premium crop of Tristram and Henry Little of Newbury, Mass. was 33 tons, 10 cwt. and 14 lbs. to an acre, or *more than fourteen hundred bushels.*

Col. Powel inclosed certificates to the President of the Pennsylvania Agricultural Society, showing that *sixteen hundred and thirty-four bushels* of mangel wurtzel, weighing seventy-eight thousand four hundred and forty-eight pounds, were produced upon an acre and fourteen perches; and a part of the same field containing thirteen contiguous rows, produced at the rate of *two thousand and sixty five bushels per acre*, weighing 44 tons, 5 cwt. and 27 lbs.

Henry Thompson of Baltimore, raised in 1833, on less than one-eleventh of an acre, 5 tons, 14 cwt. and 3 qrs., or at the rate of about *sixty tons to the acre.*

In good land, single roots of the mangel wurtzel often weigh nine or ten pounds, and sometimes even *fourteen or fifteen pounds each;* and J. A. Kenrick of Newtown, Mass., raised in 1833, a single root weighing no less than *thirty-six pounds.**

These products are enough to show what may yet be done in the cultivation of this crop, and present strong encouragement for the enterprise and experiment of farmers of western New-York, where it has hitherto received comparatively but little attention

USES.

This root is admirably adapted for feeding nearly all domestic animals. It is the best of known food for store swine; and swine fatten upon it, yielding firm pork of good flavor, when fed to them raw, equally well as upon boiled potatoes, by which the fuel and labor of boiling is saved. Col. Powel says, "My neat cattle prefer mangel wurtzel to any other root which I have offered to them. I have found its effects in producing large secretions of *good* milk, very great. * * * Its application as food for sheep is not the least important of its uses. Ewes yean usually at the season when grass cannot be supplied. The health of themselves and the thrift of their lambs, essentially depend upon succulent food being had. I am inclined to think that no small portion of the success which English breeders have met, is to be ascribed to the large stores of roots, which they always have at command."

In autumn, when the quantity of milk from cows often diminishes greatly, it may be restored by cutting the leaves of this plant and feeding them. In some instances the quantity has been doubled by this means. The leaves soon grow again, and may be cut every fortnight.† Cows fed twice a day in winter, upon 20 lbs. of the roots at a time, together with 4 or 5 pounds of hay or chopped straw, will, it is asserted, give as much milk as in summer.

In some instances when fed to cattle and sheep, this root is said to have produced *scouring.* This may be owing either to the soil adhering to the roots when eaten, or to the sudden commencement of feeding on them exclusively, instead of their being mixed with a proper proportion of dry food, such as hay, meal, or chopped straw.

This crop has several important advantages in its cultivation. It is little affected by changes of the weather; suffers little from drouth; thrives in most soils; is not attacked by any insect; and prepares the ground well for succeeding crops. The roots may be kept sound and fresh for eight or ten months.

Farmers who value their land, would find it greatly to their interest to direct their attention more to the cultivation of this crop. It has been found that two tons of mangel wurtzel are equal to one ton of hay for feeding milch cows; and that three tons are equal to one of hay for feeding cattle in general. Any one may readily calculate from this, how much greater a number of cattle may be supported by this means, from a given quantity of land, than by the usual mode of feeding them exclusively on grass and hay. Supposing for instance that thirty tons of mangel wurtzel are the average product per acre, then we shall have an amount from one acre alone equal to from ten to fifteen tons of hay. Now if a method should be devised for raising this amount of hay from an acre, it would excite universal attention and inquiry; but this crop, although possessing advantages not less important, is almost entirely neglected.

* Am. Far. vol. 15, p. 25.

* N. E. Farmer.

† It is probable however that this production of new leaves is in a greater or less degree at the expense of the root, although very large crops have been raised where this course has been pursued.

Corn

Should be planted more thickly on fertile land than on poor; as a rich soil will sustain and mature a much greater number of thrifty stalks than a poor one. This fact may easily be perceived in the fall of the year by passing through a cornfield, where in some parts five or six stalks with well ripened ears may be found in a single hill; while in others, if there are more than one or two in a hill, the ears will be found small and green, owing entirely to the difference in the quality of the soil.

☞ As we are daily in the receipt of letters from our patrons requesting grafts of the "Williamson Apple," we embrace this occasion to say, that our supply of them is now exhausted. We should be happy to forward them to order, but that gratification is now denied us. We would add, also, that many communications for the Farmer have been received, which will receive due attention when the Editor returns from New-York, whither he is now gone. We trust this explanation will account for any apparent neglect of correspondents.

Caterpillars.

It has been announced by the National Intelligencer, that Caterpillars have all been killed by the severity of the winter. The Editors come to this conclusion from having examined some *cocoons*, in which they found no living insects. The Editors are not aware, probably, that the Caterpillars passed the winter in the *egg*, not in the *cocoon*. The cocoon is merely a place of accommodation for the insect while passing from the larvæ to the perfect or the butterfly state in summer. The Butterfly deposits her eggs on the small green limbs of fruit and other trees, where they remain till the vivifying rays of the vernal sun brings them into active life. The nest of of eggs resembles a ball of shoemaker's wax wound firmly round the young limb, about half an inch wide, and an eighth of an inch thick. On looking closely at it, it resembles honey comb in formation. But the object of this is not to discuss natural history, but to hint to every person who has a tree on or near his premises, to commence war upon this most detestable of all insects. They are now coming out by thousands, and are easily destroyed. If every body would now begin, they can easily be prevented from extending their ravages the ensuing summer. Only look at it: Two young caterpillars killed now, will prevent the existence of about *sixteen millions* in the course of the season; for they breed three or four times each summer, and each time produce about 400. Half of them being females, say 200, multiplied by 400, makes 80,000 for the second brood; half being females, 40,000 multiplied by 400, makes *sixteen millions*, for the third brood! Don't this speak loudly in favor of the maxim that "a stitch in time saves nine."—*Baltimore Patriot.*

To Destroy Lice on Fowls.

When confined, or when simply roosting, in an inclosed house, hens are apt to become infested with lice, in the warmer months. Dry wood ashes, put on the ground where they dust themselves, will, says a farmer, who has given much attention to poultry, very soon entirely free them. —*N. Y. Farmer.*

From the Cultivator.

Rotation of Crops.

Hon. Jesse Buel—You will recollect that during the evening I lately spent at your hospitable mansion, while discussing the new English theory of "the matter thrown off in the soil by a species of plant, being poisonous to others of the same kind if cultivated in succession," by which rotation becomes absolutely necessary, I dissented with you from the doctrine, as altogether inapplicable to many American soils, particularly those of the western country. And I will here remark, in confirmation of an opinion which I have long entertained, that much of the current English experience as well as theory in agriculture, is altogether inapplicable and useless in our own country; and to succeed thoroughly, the American farmer should, excepting what relates to broadly established and universal principles, depend on American experience alone.

Although rotation of crops, as a system, has been adopted by the best agriculturists in the older settled parts of the United States, and is no doubt the best which can be pursued in the primitive soils, yet large portions of our country would actually suffer by such a process. I incline to think that it has yet to be settled, what is the most profitable system of agriculture applicable to a large portion of our new states and soils, for they have as yet been so imperfectly cultivated, and with so little regular system, that the full nature and capacity of those soils are little understood. Yielding, as they usually do, abundant crops with slight culture, their occupants have so far been content with their present productions, without examining by thorough experiments what more may be done.

The soils I now speak of, are the great secondary regions of western New-York, and which extend almost around the great lakes, and down the Mississippi valley. These are the most productive of our northern soils, and to the present time are mostly cultivaled without manure, or the aid of artificial stimulants, by which process the primitive soils would be altogther unproductive. But to the question of succession of crops, in opposition to the above quoted theory.

Throughout a large district of western New-York, wheat is the staple article of cultivation. The lands which produce it, although good for other grains, roots, pulse, and grasses, yield wheat in abundance, and therefore they are for that purpose the most profitable. With many farmers,for forty years past and more,it has been for several consecutive years the only crop of their fields. Again, they have let their fields rest every other crop, and fallowing for seed the season succeeding the harvest, without laying the lands into grass. Others again have laid their lands into clover, sowing the seed in the spring following the sowing of the wheat; pastured the fields after harvest, and the following year fallowed as usual. All these different modes have succeeded well, and many instances may be cited where wheat has followed wheat for many years in continued succession with equal success, and abundant crops. Many wheat soils too, the most unpromising at first, continue to yield without manure or stimulant of any kind, and have constantly improved from their first cultivation. A portion of the best wheat lands in our state,lying in Livingston, Genesee, Monroe and Erie counties, were for years unsettled and neglected; and long after the softer and better timbered lands were subdued, were these stony lime lands cleared up and put into cultivation. They are now the *surest* lands for a crop of *good* wheat. Here the quality may be depended on, when the blast, or rust, or a shrinking of the berry prevails with the wheat of the softer soils. This is also the case with large tracts of land near lake Erie, in Ohio, also in Michigan, and further west. Here indeed the question might be opened to the inquiry, as to how far lime may be the native soil for wheat; and why it is that the continual ploughing of lime stone lands, and their exposure to the atmosphere, promotes fertility, which is indeed the fact. But as my present object is to state facts for the purpose of disproving an unsound but plausible theory, I must omit the subject for perhaps some future communication.

These different varieties of soils, appear each in degrees more than another, peculiarly friendly to the production of certain crops. The alluvial bottoms of many of the streams in this and the western states, are remarkable for the production of Indian corn. I know of large tracts on the Genesee river, the Tonawanda and Buffalo creeks, which for thirty or forty years have been settled by the whites, who have made corn their standing crop, and were the Indian cornfields for all past time, so far as the Indians themselves know. Many of these lands scarce ever overflow, are ploughed only to an ordinary depth, yet yield oftentimes eighty bushels to the acre with only common culture. I have seen on the Muskingum, the Scotia and Sandusky bottoms in Ohio, fields of more than a hundred acres each, which would harvest an average of seventy-five bushels to the acre, where corn had been the annual crop time out of mind. The depth of these soils is prodigious, in many instances twenty or thirty feet, apparently of the same quality.

In the fine grazing regions of the south part of Genesee, Erie, Chautauque,Cattaraugus,and Allegany counties, immense tracts of the finest pastures exist, where no grass seed has been sown by the farmers; white clover and blue or spear grass having come in spontaneously on clearing the lands, which remains permanently good. It is now not at all diminished, after thirty years occupation. While riding through a portion of these counties a few years since, where grazing, dairy, and the raising of cattle and sheep was the principal business of the farmers. I remarked upon the very rough and uneven appearance of the meadows; having never been ploughed, and possessing, after many years of cropping, all the inequalities of surface which upturned trees and decayed trunks, although long since removed, had caused. I inquired why these, to appearance, valuable mowing lands, were suffered to remain in so rough a state, when two or three ploughings and a cultivated crop or two would make them smooth? I was answered, that ploughing would materially injure their productiveness, being never so good for grass afterwards; that immediately after clearing, the land was either harrowed into wheat or oats with grass seed, and so had since remained in grass after the first crop was harvested; yielding continually without manure, excellent crops, with no deterioration.

In this same region also, oats are raised in great abundance. In the south part of Erie, and I doubt not equally so with the other counties named in this grass district, oats in quantity and quality exceed any that I ever knew. The soils are sometimes slaty gravel, both coarse and fine; gravelly, sandy and vegetable loams, and sometimes clay and clayey marl. But the best oat lands are the slate and loam soils. In these, oats have been raised in some instances, eighteen or twenty years in succession, and I last summer saw many large stubble fields on the hills and table lands, where the oats had lodged in consequence of their immense growth, which had never been manured, and had yielded frequent and heavy crops. Yet these lands were poor for wheat, and but ordinary for corn. The farmers who cultivate them, seem fully assured that they will last for a long time with such cultivation; and although when on first learning their process, my preconceived opinions condemned their system, yet further inquiry and reflection convinced me they were correct. The oat crop particularly, they held to improve with cultivation.

Now do not all these facts prove, or at least imply, that there is some latent quality of the soil particularly friendly to the production of these different crops? And do they not open a new and most interesting field for observation and experiment? And in the relation of these circumstances, is not much of hitherto sound theory and settled experience put at fault? I confess that it seems so. In my own green experience, I find oftentimes that approved modes must be dispensed with, and others more suitable to the new and different soils that we cultivate adopted. An analysis of some of our western soils, with the best plans of their cultivation, might be amusing, if not instructive, to many of your distant readers; and although not prepared to give the former, yet I may at some future opportunity give you a chapter on the latter, and show you how amply they possess in themselves inexhaustible elements of fertility; and why, contrary to the opinions of many of our Atlantic neighbors, who fully believe that all new lands must be in a few years exhausted, and without stimulant by manure become as impoverished as their own, they may, by judicious cultivation, remain abundantly productive, and an almost inexhaustible source of wealth to their proprietors.

I am so well convinced of the utility of stocking newly cleared lands into grass for mowing and pasture, with wheat and oats,that I shall this spring put in upwards of 100 acres with oats alone, having already sown about 50 acres with wheat. I last June had about 40 acres laid into grass with oats immediately after clearing, with a thorough harrowing; and a finer and more promising piece of grass I have seldom seen. Timothy and red clover, with an occasional sprinkling of red top, is the principal grass used in this region. These lands are excellent for wheat as well as grass, and will bear ploughing and laying down with evident advantage as occasion may require. The white clover rapidly works in, making a thick bottom, and adding largely to the crop of hay. For a rich supply of after feed, no grass can be more valuable and nutritious. Here I am reminded of another fact, which is, that on some portions of our rich *wheat* lands, unless watered, the red clover, timothy and red-top, are in a few years run out by white clover and blue grass, which renders their ploughing up and cropping necessary in order to let them again well into meadows; a fact which fully demonstrates to my mind the above expressed opinions, that particular soils are peculiarly fitted by nature for certain crops, and require a totally different course of cultivation from others.

Very truly and respectfully yours,
Buffalo, March 10, 1835. L. F. Allen.

From the Cultivator.

Queries and Answers, in Relation to Sheep Husbandry.

The five queries which are quoted below,came from an anonymous correspondent. They were forwarded to a gentleman preeminently distinguished as one of the best judges of stock, and withal an extensive breeder, who has promptly and very obligingly furnished us with the subjoined answers.

1. "*Of what breed or stock had a beginner better compose his flock, his object being the growing of fine wool?*" Pure Merino, crossed with high bred South Downs.

2. "*What are the prices at which the Saxony, South Down, Cotswold, Leicester, Bakewell, or Merino ewes, can be purchased respectively, after shearing?*" From a *good* flock, you cannot *select ewes*, or it would not long remain a good flock; lambs or yearlings may be selected perhaps—price very various—depending on purity of blood, and individual excellence.

3. "*What breed produces wool of the greatest value?*" Saxony *per pound*—Merino *per fleece*. "*And what breed yields the heaviest fleeces?*" The great Lincoln, or Romney Marsh sheep.

4. "*What breed is most hardy and best adapted to our climate?*" South Downs, *certainly.*

5. "*On what lands how many sheep per acre can be profitably kept?*" That depends on the breed of sheep, and quality of land, but much fewer than are generally kept.

The Saxon sheep undoubtedly produce the finest wool; but their fleece is light, seldom exceeding 2¼ lbs. in weight, and is too open to resist our storms. They are feeble in constitution—require great care—are poor nurses, and their lambs are raised with difficulty. The mutton

from such sheep must necessarily be of a miserable description.

I believe that in Connecticut, even the pure Saxony sheep may now be purchased at a comparatively low price, say from six dollars to four dollars a head, and perhaps lower still.

The *old fashioned pure* Merino sheep, which were imported by Col. Humphrey, and those associated with him, (but which are now almost extinct,) were a much better constitution sheep, and *more* than made up by quantity for the difference in the quality of their fleece—the close, thick texture of their wool resisted our cold wet storms—their lambs were much easier raised—the ewes were better nurses, and on the whole I am convinced they are a much more profitable sheep than the Saxony. I must, however, remark, there are several varieties of the Spanish sheep; and I would carefully avoid the "gummy"* family fleece, which, however, must not be confounded with that, which, though of a dark color, contains only the grease necessary to render it impenetrable to the weather; the former being very objectionable to the manufacturer, while the latter is readily cleansed and worked.

I desire to be understood as speaking of the *pure* breeds, and not of *grade* sheep, which so universally abound in this state, for *they* have no distinctive or fixed character, but vary with their degree of consanguinity to the pure imported blood. Indeed, I feel well assured that there are very few individuals of the pure unmixed blood to be found.

The earlier merino flocks of this state, were obtained from the introduction of imported bucks, and those were purchased at great prices, which, with the native ewe, formed the ancestry of our fine wooled flocks: these had not attained nearly to the excellence of the pure merino, in the staple of its wool—its compactness—its uniformity, or softness, when the Saxony cross was introduced, and became almost universal in a surprisingly short time—and this is the true history of almost all our fine grade sheep in this state. It is not, therefore, to these flocks that I allude, when I speak of *pure* merino, or Saxony sheep.

As to price, I presume such Merino sheep are more costly now than the Saxony! from the fact that farmers are now aware of their error in using the Saxon cross, which has ruined the constitution of their flocks, decreased their clip of wool nearly one half, and reduced their produce, until, with ordinary management, more than twenty-five lambs to an hundred ewes, are seldom raised. A Merino buck, of *unquestionable* purity, whose ancestry were both imported, will now sell for twenty-five and thirty dollars; the same animal, eighteen months since, might have been picked up at $8 and $10.

The Leicestershire, Bakewell, and Cotswold sheep, are so crossed and mingled in this country, that the distinction is lost, except to the practiced eye, who can find individuals in the various flocks which partake, as it may happen, more of the characteristics of the one parent or the other. These are a long, coarse wooled sheep, possessing much beauty of form, early maturity, and are quick feeders; but they require rich lands for their pasture, and though their constitutions are good, yet their fleece is sufficiciently open to admit the penetrating rains of our severe storms, and then it is, that their heavy fleeces are seen separated along the ridge of the back, thus admitting the wet directly to the skin, until the animal is chilled through. They are good nurses, and make fine lambs; their meat originally coarse and long in the grain, and white in its color, was much improved by Mr. Bakewell, and under his management became superior to the other large, long wooled sheep. Some of the best flocks of this variety may, I believe, be found in the sheep folds of Mr. Dunn and Mr. Wilkinson, in Albany county, or of Mr. Adcock, Mr. Musson and Mr. Clark, in Otsego county, all of whom have given much attention to this fine variety of sheep. Average produce in wool, I should think, from five to six pounds, though individuals are found carrying fleeces of ten and twelve pounds! Price of good lambs, I believe, from ten to fifteen dollars.

The South Downs are as yet but little known in this country, but in my opinion, are decidedly better calculated than any other, for the domestic purposes of our farmers. They are of a medium size, beautiful in their forms, large loins, broad chested, fine in the head, small boned, and fine in the fleece, which averages 4 lbs. in the ewes; the bucks reach to 7 lbs.; in quality it is equal to half blood Merino, but stronger in its filament, and *entirely* impenetrable to storms of snow, sleet, or rain; they are regardless of our coldest weather, and possess hardier constitutions than any sheep I know. The wethers attain to about 28 lbs. per quarter, and are allowed to be the best mutton sheep in England, the meat being dark in color, short grained, mild in flavor, and jucy. They are excellent nurses, and quick feeders. Here again I beg to be understood as alluding to the *pure* and *high bred* South Down; such as it is found in the sheep-folds of the great sheep-masters in Sussex; not the common unimproved animals of the Downs, weighing 14 lbs. per quarter, and carrying but 2¼ of wool.

As to prices—they are best ascertained from the sources of the respective breeds, and must vary much, according to the *established purity of the blood*, and the excellence of the individuals; the one a much more difficult point to ascertain than the other.

For the last three years, preparative to commencing my own flock, I paid much attention to the sheep husbandry of this district; visited those who owned large flocks, and soon discovered that they were all on the decline; I corresponded with others, and found the introduction of the Saxony blood was universally followed by a decline of constitution, and all its attendant evils; excepting in one instance, where a gentleman wrote me that he had just purchased a flock of Saxon merinoes. He assured me that in Oneida county, they were a hardy, healthy sheep—shearing on an average about 3 lbs. of wool, *and the purer the Saxon blood, the heavier was the fleece!!* This was so contrary to my own experience, having materially injured a flock of nearly two thousand grade-merinos by one single cross of the Saxony, that I still continued my plan of forming a flock from the *pure, full bred*, large merino sheep on the one part, and from the high bred sheep of Mr. Ellman's flock of South Downs on the other. Assisted by the indefatigable perseverance, acute discrimination, and previous knowledge of a friend, (whose father was concerned with Col. Humphrey in his various importations and sales of such sheep,) I collected, after 18 months search, about 30 full bred Merino sheep, pure as imported, *known* to be directly descended from those importations. Their quality of wool is as fine as perhaps any grade Saxony flock around me. The ewes will average 4 lb. fleeces. My South Downs I imported from the celebrated flocks of Mr. Ellman, in England, whose two year old wether sheep beat all England last Christmas, at Smithfield, and took the first prize. He was judged to weigh 32 lbs. per quarter; and I am happy to say, has been presented to me by Mr. Ellman, as a specimen of excellence, and will probably arrive in this country before long, as he was to be shipped from London the first week in this month, for New-York. From Mr. Ellman, I procured six yearling ewes, and a *yearling* buck; the ewes have wintered in a yard with an *open* fence, and an open shed, closed only at the back; they lambed *there* from the 23d to the 28th of February, on which day the thermometer was as low as 4 deg. On the 1st, 2d, 3d, 4th and 5th of March, the thermometer, in the shade, was from zero to as low as 6 deg. *below* zero, at sunrise! and yet my lambs, young as they were, never suffered in the least from the severity of the cold; they never showed the slightest consciousnes of its intensity! and are allowed by all who call to see them, to be the finest lambs they ever saw. I find a rapid demand for all I can spare, from both my flocks, at liberal prices. The engagements for my South Down buck, for *next* season, have been filled for some months past; and two days since Mr. Musson, a Leicestershire breeder, called to see him, when I took the opportunity of requesting he would weigh him; he very obligingly did so, and his exact weight was one hundred and fifty-nine pounds and a half. I have ventured on these minutiæ in regard to the *high bred* South Downs, as these sheep are very little known in the United States; and facts are more satisfactory than opinions: and again I must insist that I do not allude to the *unimproved* breed; I do not allude to the South Downs of Cully's day, from whose writings I have seen various extracts as descriptive of the breed, nor do I include the Hampshire Downs; I confine myself to the *high bred sheep* of the present day; and if any would oppose to them the fast rooted prejudice of high breeding being inseparable from delicacy, I would refer them to the facts above stated, and ask of them a personal inspection. I would further add, that it is an acknowledged fact, that Mr. Ellman's flock turns out more lambs than ewes! averaging 750 lambs annually, for several years, from 600 ewes.

A strong advocate myself for purity of blood, and a known line of ancestry, which confers excellence by descent, still I believe, for this country, the most valuable description of sheep may be raised by judiciously crossing the Merino and South Downs, thus uniting the fine fleece of the one with the beautiful carcase of the other, and gaining at once a constitution siuted to our climate. This was done some years since on the introduction of the Merinos into England, and was attended by the most flattering success, the flock beating every other for the COMBINED excellence of wool and carcase. Both these breeds being fine, close wooled sheep, there is no extravagant dissimilarity, no wide contrasts to be amalgamated, and a more uniform character is easily obtained in the progeny, from which it will do to breed again. This is not the case with a cross between the long and short wooled varieties; the first cross will sometimes make a good animal, but when bred from again, the produce is uncertain, sometimes "taking back" on the long wooled parent, and sometimes on the opposite side; and when apparently combining in the fleece a united influence of the two breeds, a closer examination will show an unevenness of length and filament that ill suits the manufacturer.

R.

Maple Grove, Otsego, March 26, 1835.

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* The term "gummy" is in common use with farmers, and will be understood.

Canandaigua, 3 mo. 26th, 1835.

RESPECTED FRIEND JESSE BUEL:

Thine of 16th inst. duly reached me. As I am as ready to give as to receive instruction, I hope thou wilt be willing to give me thy opinion as to the proper depth of ploughing a field for corn. It contains 8 acres, is a rich sandy loam, leaning to the south. (*a*) At the time of threshing last fall, had the straw of 40 acres wheat drawn to it and laid in heaps; this will be spread and raked into the furrow. It was my intention to spread it last fall, believing it would become sufficiently tender to be separated by the coulter; but some of my friends who had tried it, found it not to answer, and advised my leaving it in heaps. It is my intention to sow plaster on the straw after it is spread. When ploughed, shall roll it, then harrow—and my opinion is, that it would be an advantage to roll after planting (*b*); my oats and wheat have evidently been benefitted by the operation. I have come to the conclusion that most seeds vegetate sooner and stronger for having the earth pressed to them. Some late reading has produced a conviction, that farmers *generally place seeds too deep*. What is the proper depth for corn on *sandy loam?* (*c*) I always harrow my ground *before* sowing wheat.

Thou mayest think it strange that I should ask

thy opinion respecting the depth of ploughing. I will here state that I usually plough 6 to 8 inches; but I have been staggered by the accounts of Earl Stimpson's (*d*) abundant crops from 4 inch ploughing. I think such statements, unaccompanied by reasons for the practice, are calculated to do injury. I have always supposed, that crops were less likely to be injured either by wet or drouth on deeply ploughed land, and my practice has been in accordance with this belief. I am aware that manure may be placed so deep that it will not ferment—but will that be the case at 8 inches? (*e*) My experience says no.

There are certain principles in husbandry, which have obtained among the most enlightened agriculturists. If the adoption of those principles have resulted from a great variety of experiments, so as to satisfy us that they may be safely observed in most cases, would it not be proper, when a satisfactory result of a different practice has been given to the public, by one who stands high as a scientific farmer, to give also the reasons for such departure? Without such explanation, the inexperienced farmer may be led greatly astray. Among those principles, there are no two more important, in my opinion, than *deep ploughing*, and, that *when manure has been turned into the soil, it should lie unisturbed until the field is again laid down to grass.* (*f*) Now it will strike every practical farmer, that without an attention to the first, the last is impossible. Unless manure and sward are buried 7 or 8 inches, the cultivator cannot be used without disturbing them.

I observe thy recommendation to plant corn nearer than we have been accustomed to do it. I think we cannot use the cultivator (*g*) where it is nearer than three feet; and where wheat is to be sown, I am of the opinion that ground would be in better order, should that implement pass both ways. It is my intention to sow my corn ground, notwithstanding it is my opinion that it would be better husbandry for peas or barley to intervene.

Many are in the practice of ploughing oat stubble twice, and some three times, but we have discovered a much better method. As soon as the oat crop is taken off, go in with a sharp and heavy harrow and drag it thoroughly; the scattered oats and weeds will vegetate immmediately, and turned in with the stubble by one ploughing, will not only enrich the ground, but it will be left in better order for the wheat crop, than by the old practice.

Impressed with a belief that some legislative action is necessary, to induce our farmers to turn their attention to the raising of the mulberry, and propagation of silk worms, I would propose that the Legislature should either furnish every poor house farm, or compel the overseers of the poor to procure 200 mulberry trees (*h*) of good size, to furnish the infirm poor with a light and profitable employment.

If any of the foregoing remarks are worth extracting for the Cultivator, thou art at liberty to use them. Thy respectful friend,

WM. S. BURLING.

NOTES.

(*a*) We subscribe to the maxim, that *the deeper the tilth the more abundant the crop.* By tilth we mean the true soil, or the stratum which the plough turns over, and with which the vegetable matter, the food of the plants, is well blended. The *proper* depth depends on the nature of the soil and subsoil. In corn ground, which is properly a soil of a sandy, loamy or gravely texture, we think six to nine inches a suitable depth. The roots strike fully to this depth, if there is food for them; and this serves to brace the stock, and to avert the effects of drouth.

(*b*) It is undoubtedly beneficial to press the earth to seeds, particularly small and light ones, with a roller; but in planting corn our practice is to substitute the planter's foot for the roller, who steps upon each hill.

(*c*) All seeds should be as superficially covered as a due regard to keeping them moist will permit. Seeds will not germinate without the combined agency of moisture, heat, and air. If buried deep, they in a measure lose the influence of the two latter of these agents. Rolling, or otherwise pressing the earth upon the seeds, slightly covered, tends to prevent the evaporation of the moisture necessary to their germination.

(*d*) Mr. Stimpson's farm, we understand from a gentleman of geological science, is of a peculiar kind, to which ordinary rules will not apply. It is principally underlaid by a porous rock, the debris of which, instead of possessing fertilizing qualities, is considered deleterious. If we are rightly informed, Mr. Stimson's system of shallow ploughing is rather a matter of necessity. His system does not answer our turn.

(*e*) The fermentation of manure, like the germination of the seed, requires the presence of heat and air, as well as of moisture. The fermentation may be retarded by burying it deep; but I have ever found, that, in corn ground, it does ferment, in time for the wants of the crop, at the depth of eight inches.

(*f*) Upon this point we have some doubts, although the rule laid down tallies with the opinions of Lorrain, whose authority we highly respect. While manure is undergoing fermentation, its fertilizing properties, the gaseous portions, rise towards the surface; but after fermentation has exhausted its powers, the tendency of the residuum is to sink deeper into the soil. Whether, therefore, the advantage of having rotted dung near the surface, would or would not be more than counterbalanced by the wasting influence upon it of the winds and sun, is a question we are not prepared to decide.

(*g*) We plant 3 by 2½ feet, and work the cultivator but one way; but were we disposed to have rows both ways, *our* cultivator would readily pass between them, as its cutting breadth may be contracted to 20 inches. We think this would be an improvement, by keeping the surface more mellow and clean, matters of no little moment.

(*h*) It would save expense were this matter undertaken by the overseers, without legislative provision. An ounce of mulberry seeds would cost, at the extent, but 50 cts., and, if managed with care, would produce from two to three thousand trees, which would afford the material for silk almost as soon as large trees. And besides, we are afraid that any appeal for legislative aid to agriculture will be altogether disregarded, unless it can be made to subserve political party purposes.—*Ib.*

From the Buffalo Whig.

Beech Timber.

MR. HASKINS—In your paper of the 7th inst. I notice a wood-chopper has called public attention to a valuable timber, the red beech; which, though not abundant in this part of the state, is found in great perfection on many of the rich bottom lands, not subject to inundation. The qualities and value of this wood are not generally appreciated; especially where white oak abounds, as in this and the adjacent counties.

Those who have given particular attention to our forests, know that the white oak is rapidly disappearing. The fair prices paid for staves, square timber and ship plank, on the sea board, has induced owners of white oak lands to fell the best of their timber. And those who have been desirous to preserve theirs, have not been very successful, where the standard of moral rectitude has not by any means been elevated by the connivance between the dealers in lumber and those who get it out. This state of things has produced the most wanton waste, and induced many owners to cut timber they would have been glad to preserve.

There is, however, another cause for fearing that in less than half a century, scarcely an oak will be found, where now they are so abundant. The old oaks are dying off, and sugar-maple, beech and hickory, in a great measure constitute the growth of young timber. The order of nature, in the vegetable as well as in the geological kingdom, appears to require a succession or transformation. Perhaps the geological change produces the vegetable. Making no pretence to either of these sciences, I will not undertake to decide; but the fact is susceptible of demonstation. There may be exceptions: the oak openings form one which occurs to my mind; but it must here be remarked, that the soils of the openings is different from the other oak lands. They occupy the stony ground and ridges; and here young oaks are found to constitute almost the only tree. Not so the heavy timbered lands, where the giants of the forest rear their towering tops, and spread their mighty limbs abroad to heaven. Many of these monarchs, that were but a few years since as flourishing as the bay-tree, are now dead; and the thunder of their fall is not owing to the enterprise of the lumber merchants.

It will, therefore, be gratifying to you to learn that so valuable a timber as genuine red beech is found among the trees which are extirpating the whole tribe of oaks from our forests. By referring to Browne's Sylvia Americana, page 151, you will find a description of this tree. It is valuable for square timber, for posts to fences, for joists and scantling, for pile-driving and wharfing timber, and, next to sugar maple, to any timber we have for fire-wood. To secure its durability, it should be cut in February. If to be used for fence-posts, it should be seasoned before it is set in the ground. With this precaution, they will last as long as red cedar. There is one other use to which this wood may be applied to great advantage, and that to a very great extent, if we should judge from the number of notices in the Albany Argus; I mean the construction of rail-roads. It will be less expensive than red cedar, and much stronger.

As there are three varieties of beech in this neighborhood, allow me to be particular in the description of each. The red cannot be mistaken when the tree is felled, the heart of which is from two-thirds to three-fourths of the diameter of the tree, of a bright red color. The more heart, the better the timber. It flowers in May, and of the three varieties there is scarcely any perceptible difference in the blossoms. Its leaves are a little larger and thicker than either of the others; its leaf is more deeply indented on the edges, or, as the botanists would say, has longer teeth. Its fruit is only about half the size of the white beech. In rich soil, they grow frequently from 25 to 30 inches in diameter, and will furnish square timber of various lengths from sixteen to fifty feet in length.

The white beech is the inverse of the red, the sap comprising most of the tree. It is valuable for fuel; but it is principally esteemed for its tenacity and durability, when kept from exposure to wet or moist atmospheres. It is invaluable for plane stocks and other tools. The less heart for this use the better wood. The second growth, or trees that border open grounds, are preferred; and tool-makers cut them when only thirty or thirty-five years old. This timber perishes in a few years, exposed to the weather.

The bastard beech is inferior to either of the others; is about one-third heart, of a pale red, variegated in many instances. It makes good fire-wood, if not left in the forest after cutting. If thus exposed, the sap loses most of its value for fuel; and two months will show it in a state of rapid decay. Let me remark here, that no timber intended for fuel should be suffered to remain long in the forests after it is cut. By leaving it thus to season, it loses as much of its value as it does of its weight; and though the former saves in the labor of hauling, the purchaser had better pay a third more for wood seasoned in the open ground, exposed to the March winds and the summer sun. The impetus given to business in your city, by its growing prosperity, so completely occupies the attention of your citizens, that they trouble not themselves about these small matters; but whenever they shall get a little over with their speculations, they will find them worth attention. A WOODSMAN.

Tonawanta, Jan. 16, 1835.

From the New-England Farmer.

Cultivation of Corn.

Mr. Editor—In answer to Mr. Hamlin's queries on the culture of Indian corn, in your last paper, and agreeably to his request, I will state that for fifteen years before the last, I was located near the city of Boston, say about twelve miles; of course the climate is about the same as in or about the city. The farm that I cultivated contained a variety of soils, as most farms do in that vicinity. What I call a sandy loam, on a substratum of gravel, I consider the best for corn, although most soils that will grow timothy and clover will grow corn.

The period that land should lie in sward, depends upon circumstances; such as the crop of grass and feed it produces, rotation of crops to be pursued, &c. Generally speaking, I should say from four to five years is the proper time; I plough as deep as the nature of the soil will admit. I prefer deep ploughing, say from six to eight inches, and furrowed light, so as not to disturb the sod.

The depth and time of planting depends much on the backwardness or forwardness of the season, state of the ground, &c. If I do not put manure into the hills, I either mark the furrows with chains attached to a pole, or a similar machine; or furrow light with a horse plough, three and a half feet apart; in that case I cover the corn about one and a half inches deep with fine earth. If I put manure in the hill, I spread the manure with my foot so as to have the corn come as near the earth as possible; then cover all the manure and corn completely over, say about two inches deep. I prefer planting about the middle of May, if the season will admit.

As to the time of dressing, that likewise depends upon circumstances. If the field should be weedy or grassy, as is often the case, I dress as soon as I can see the corn in rows, say three inches high; and never plough or hoe after the tassals or flower spikes show themselves. As it regards topping or cutting stalks, relative to the effect it has upon the crop of grain, and the comparative value between the stalks, when cut green, or left on until harvesting, I think I shall offer some remarks hereafter. I will merely state in this, that the result of frequent experiments has completely satisfied me that it is decidedly best not to cut them.

As to earthing up, or raising the earth round the corn, it is my opinion rather a damage than otherwise, as the nature of the roots, and the directions they take, does not require it. I merely draw up a small quantity, for the porpose of covering the small weeds, that grow so near the corn, that you cannot cut or remove them with the hoe. Coarse barn manure I generally use for planting potatoes, or making compost for corn or other crops. Hog manure I work into compost for putting in the hill for corn and vines.

The "Phinney corn" is the earliest and best variety of field corn that I am acquainted with. The pure kind may be had at Mr. Barrett's Seedstore in Boston. In regard to the kind of turnep seed, I prefer the white flat, yellow stone, and Aberdeen; the two latter keep the longest, the former produces the most. I generally sow after passing with the cultivator, and before the last hoeing, which sufficiently covers the seed. The first rain that falls will completely cover all that the hoe leaves.

If Mr. Hamlin should procure the true "Phinney corn," he will be puzzled, when he comes to harvesting, to find many ears that contain less than twelve rows; if at all, it will be on a stalk that contains a twelve rowed ear.

D. Chandler.

Thompson Island, April 12, 1835.

Calves.

A spoonful of flax seed, steeped an hour or two in warm water, and given to calves with their accustomed food, once a day till they are six or seven weeks old, is very beneficial to them. When Indian meal, which is highly valuable, is added to their food, a little magnesia or chalk, now and then, will prevent scouring.

Meteorological Table,

KEPT AT ROCHESTER, FOR APRIL, 1835.

Days.	10 A. M. therm.	10 A. M. barometer	10 A. M. winds	10 A. M. sky	10 P. M. therm.	10 P. M. barometer	10 P. M. winds.	10 P. M. sky
1	55	29,50	W	fair	48	29,45	E	fair
2	70	29,29	W	do	49	29,25	W	do
3	52	29,30	S W	do	47	29,30	E	do
4	56	29,30	E	do	40	29,35	N E	cloudy
5	38	29,10	N E	cloudy	34	29,05	N E	do
6	37	29,00	N W	do	36	29,10	N W	do
7	40	29,20	N W	fair	38	29,35	S W	fair
8	50	29,30	W	do	50	29,30	W	do
9	64	29,30	W	do	54	29,45	W	do
10	66	29,55	N W	do	50	29,45	E	do
11	70	29,55	S E	do	62	29,55	S	do
12	70	29,50	S	do	55	29,40	S W	do
13	44	29,35	W	cloudy	34	29,40	N W	do
14	30	29,45	N W	do	28	29,60	N W	do
15	40	29,66	W	fair	42	29,30	W	do
16	52	29,15	W	do	26	29,30	N W	cloudy
17	28	29,45	N W	cloudy	26	29,70	N W	do
18	35	29,85	W	fair	36	29,75	E	do
19	54	29,35	S	cloudy	53	29,15	S W	do
20	42	29,05	S E	do	32	29,35	N	do
21	46	29,45	S W	do	40	29,30	S W	do
22	40	29,30	W	do	37	29,50	W	do
23	46	29,55	W	fair	32	29,60	N W	fair
24	38	29,75	N	do	38	29,70	S	do
25	40	29,45	S E	cloudy	34	29,55	N E	do
26	50	29,60	E	fair	40	29,60	W	do
27	50	29,60	N E	do	44	29,45	S E	cloudy
28	36	29,25	N	cloudy	40	29,35	S W	fair
29	54	29,40	W	fair	40	29,50	N W	do
30	54	29,60	N E	do	50	29,60	E	cloudy

Means.—Ther. 44.8—Barom. 29.41—Rain 2.6—Snow 9 inches.

150 lbs. Lucern Seed,

Of fine quality and proved vitality, for sale at a reduced price, at the Rochester Seed Store.

Also, A few thousand Silk Worm Eggs, just received and for sale as above.

REYNOLDS & BATEHAM.

May 1, 1835. may 2-tf

FLOWER SEEDS.

A SPLENDID assortment of Annual, Biennial and Perennial Flower Seeds, put up in small papers at 6 cents each, or 20 varieties for $1, and 100 varieties for $4, for sale at the Rochester Seed Store.

REYNOLDS & BATEHAM.

may 5-3w

Mulberry and Locust Seed.

A FULL supply of *White Italian Mulberry* and *Yellow Locust* Seeds, warranted pure, fresh and genuine, just received and for sale at the Rochester Seed Store.

REYNOLDS & BATEHAM.

may 5-3w

Wanted,

A PERSON well qualified to take charge of one of Andrew's Patent Shingle Mills. A person that can bring satisfactory testimonials of character and capability, will meet with a good situation, constant employment, and cash down. None need apply but those that are well acquainted with the management of circular saws. For further particulars inquire (if by letter, post paid,) of J. G. STOCKLEY, Allanburgh Mills, Thorold Post Office, Upper Canada ap 11-5t

Fruit Trees, Grape Vines, &c.

FIVE thousand Grafted Apple Trees, mostly of large size and thrifty growth, consisting of 20 or 30 of the most valuable kinds known. Also, an assortment of Peaches, Plums, Pears, Cherries, Quinces, Currants, Gooseberries, Raspberries, &c., and both native and foreign Grape Vines, from one to six years old.

Also, 5,000 White Italian Mulberry Trees, two years old.

All of which are for sale, either in small or large quantities, at low prices, by

REYNOLDS & BATEHAM.

Rochester, April 11, 1835. ap 14

Fine Potatoes, Oats and Corn.

EARLY June, Early White Kidney, Black Kidney, Foxite, Mercer, Pinkeye, and Irish Cup, Potatoes; 50 bushels of superior English Oats, and a quantity of choice, selected Seed Corn, of the best kinds, for sale at the Rochester Seed Store.

REYNOLDS & BATEHAM.

Rochester, April 11, 1835. ap 14

A Valuable Farm For Sale.

THE valuable Farm owned and occupied by Elias Beach, 4 miles west from the city and situated directly on the Erie Canal, containing 240 acres of good wheat and grass soil, well watered, with good house, barns, out houses, &c. Five thousand dollars will be required in cash, and the balance may remain on bond and mortgage for a term of years. Title indisputable. The price per acre may be learned on inquiring of JAMES H. WATTS, at No. 3 Exchange-street, Rochester, and the owner will at all times be ready to give further particulars on the premises. ap 18-tf

Robbins' Patent Planting MACHINE.

WITH this machine Corn, Beans, Peas, and all seeds of an oval shape can be planted with more system and correctness than can be done in the usual manner of planting with the hand and hoe.

One acre of ground can be planted, placing the seeds any given distance apart, from two or more inches, and rows two and a half feet between, in three hours time.

Machines can be had by applying to C. N. Bement, Treasurer of the State Agricultural Society, Albany; Bushrod Buck, Lanesborough, Berkshire county, Mass.; and Daniel I. Buck, Lowville, Lewis county, agent and proprietor for making and vending said machines, at all of which places it is intended to keep a supply on hand.

Lowville March 25th, 1835. ap 14-tf

Monroe Horticultural Garden & NURSERY.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for *Mr.* Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, *Monroe* co. N. Y. Sept. 13, 1834.

Rochester Seed Store & Horti- CULTURAL REPOSITORY.

No. 5 *Arcade Hall, next door but one to the Post-Office.*

REYNOLDS & BATEHAM, having completed their assortment, now offer to the public the best and most extensive collection of Garden, Field and Flower Seeds, ever before offered in the Western country.

Their stock is entirely new, and having been purchased directly of the growers and importers, the vitality and purity of the seeds are expressly guaranteed. Farmers and Gardeners will find a great variety of new and valuable Seeds not heretofore introduced into this section of country.

They have also an assortment of superior Horticultural Implements, Books, &c.

Merchants and others supplied with assortments of Seeds for retailing at a liberal discount.

All orders for Seeds, Fruit or Ornamental Trees, Shrubs, Grape Vines, Green-House Plants, &c. &c. by mail or otherwise, will meet with prompt attention.

Cash will at all times be paid for Grass and Clover Seed, Peas, Beans, &c.

A large and comprehensive Catalogue of the Establishment is just published, and will be furnished gratis on application. mar 19

From the Cultivator.

Dairy Husbandry in Holland.

The Highland Society of Scotland, considering the advantages that might be derived from an acquaintance with the modes of managing dairies in Holland, offered, in 1831, a premium for the best report upon that subject, founded on personal observation. The premium was subsequently awarded to John Mitchell, whose report was published in 1833. We abstract from this report such facts as are likely most to interest our dairy farmers, and lead to their improvement. We will barely premise, that the products of the Dutch dairy, particularly the butter, are in higher demand than those of any other country. Vast quantities of butter are annually exported to Britain, the West Indies, &c. 116,233 cwt. of butter, and 167,913 cwt. of cheese were brought from Holland to England in 1830. Were the same care taken in manufacturing our butter which is bestowed in Holland, we should find a brisk foreign demand for all our surplus stock. But at present our butter is inferior, will not bear transportation to a warm climate, and will not compete with that of Holland.

Pasture.—The pastures in Holland have been reclaimed from the ocean. They are flat, low and moist, the water in the small canals or dykes always rising nearly to their surface. They are of course permanent, or are seldom broken with the plough. They are top dressed every third year with cow-house manure mixed with the scrapings of the small canals, and the first year after dressing reserved, generally, for hay.

Supposing the whole growth 700, the Dutch farmers consider that there grows, for the consumption of the cow, from the beginning of spring till May, 135 parts; in June, 20; July, 135; August, 95; September, 55; October till winter, 80.

Cows are particularly selected for the dairy. Their price is about 9 or 10*l.* sterling—40 to 45 dollars. They are generally fattened and turned off to the butcher at 8 years old, and bulls at four or five. The cows are turned to pasture in March or April, and are at first covered with a very thick cloth of tow, covering the upper half of the body from the shoulders to the tail, to prevent diseases from cold. They are pastured about 30 weeks. Hay is their common food in winter, though rape cake and brewers' grains are sometimes added. The byres or cow-houses are generally lofty, airy, paved with large square bricks, and kept perfectly clean. The roof is about 10 feet high. There are no racks or mangers, but the food is placed in gutters, always clean, near their heads. Gutters in their rear serve to carry off the urine and dung, and these gutters are also kept clean.

Process of Manufacture.—The cows are always milked by the men, and the butter and cheese made by the women, generally of the family. Ninety cows are managed by nine men and two women. There is generally one man required to ten cows; while two women are considered enough for any dairy. The farmer reckons that he can make 100 guilders, about $40, per annum by each cow.

Butter.—There are three distinct kinds of butter made in Holland: *Grass butter*, made when the cows are at grass; *Whey butter*, from the whey of sweet milk cheese; and *Hay butter*, made in winter.

Grass Butter.—The cows being carefully milked to the last drop, the pitchers containing the milk are put into the *Koelbak*, a description of which will be found in the preceding article.* When the cream has been gathered and is soured, and if there is a sufficient quantity from the number of cows, they churn every 24 hours, the churn being half filled with the soured cream. A little *boiled* warm water is added in winter, to give the whole the proper degree of heat, and in very warm weather, the milk is first cooled in the *Koelbak* or cooler. In small dairies, the milk is sometimes churned, when soured, without separating the cream. The butter, immediately after being taken out of the churn, is put into a shallow tub, called a *vloot*, and carefully washed with pure cold water. It is then worked with a slight sprinkling of fine salt, whether for immediate use or the barrel. When the cows have been three weeks at grass, the butter is delicious—is made in fanciful shapes of lambs, stuck with the flowers of the polyanthus, pyramids, &c., and sells as high as 44 stivers, 60 to 70 cts; the 17 oz. or Dutch pound. If intended for barreling, the butter is worked up twice or thrice a day, with soft fine salt, for three days, in a flat tub, there being about two pounds of this salt allowed for fourteen pounds of butter; the butter is then hard packed by thin layers into casks, which casks are previously carefully seasoned and cleaned. They are always of oak, well smoothed inside. Before being used, they are allowed to stand three or four days, filled with sour whey, and thereafter carefully washed out and dried. Each cow, after being sometime at grass, yields about one Dutch pound (17½ oz.) butter per day.

We beg our dairy women to mark two points in the preceding process. 1. *No salt is used but what is incorporated with and dissolved in the butter, and which is necessary to give it flavor;* and 2d, *the butter* intended for keeping *is worked from six to ten times*, to incorporate the salt, and *to separate from it every particle of liquid*, which, if left in it, would induce rancidity.

Hay Butter undergoes a like process.

Whey Butter.—The whey is allowed to stand three days or a week, after being separated from the curd, when the cream is skimmed off, or the whey itself put into a churn, and butter is formed in about an hour. By this process, in winter one pound of butter is obtained from each cow in a week, and in summer 1½ pounds. The relative prices are generally, grass butter 8½ stivers, hay butter 7, and whey butter 6.

Cheese.—There are four kinds of staple cheese made in Holland,—the *Edam* and *Gouda*, both made from unskimmed milk; and two kinds, called the *Kanter Cheese*, made from milk once and twice skimmed.

Edam Cheese.—The process of manufacture of the Edam cheese is as follows: The milk being yearned as soon as taken from the cow, when coagulated, the hand, or a wooden bowl, is passed gently two or three times through the curds, which are then allowed to stand a few minutes; the bowl or finger is again passed through them, and they stand a few minutes. The whey is then taken off with the wooden bowl, and the curd is then put into a wooden form, of the proper size and shape of the cheese to be made. This form is cut out of the solid wood by a turner, and has one hole in the bottom. If the cheese is of the small size, (about 4 lbs.) it remains in this form about ten or twelve days; if the large size, it remains about fourteen days. It is turned daily, the upper part during this time being kept sprinkled with about two ounces of purified salt of the large crystals. It is then removed into a second box or form of the same size, with four holes in the bottom, and put under a press of about 50 lbs. weight, where it remains from two to three hours, if of the small size, and from four to six if of the large size. It is then taken out and put on a dry airy shelf in the cheese apartment, and daily turned for about four weeks, when they are generally fit to be taken to market.

Alkmaar, in North Holland, is the great market for Edam cheese. It is not uncommon to see 800 farmers at the market, and 470,000 cheeses for sale on one day. The price there averages about 30s. per cwt. ($6,66.)

Gouda Cheese.—This kind of cheese is also made from the milk immediately on its being taken from the cow. After gradually taking off the principal part of the whey, a little warm water is put upon the curd, which is left standing for a quarter of an hour. By increasing the heat and quantity of water, the cheese is made harder and more durable. All the whey and water is then taken off, and the curd is gradually packed hard into a form cut out by the turner, flatter and broader than the form for the Edam cheese. A wooden cover is placed over it, and the press, with a weight of about 8 lbs. put upon it. It is here frequently turned, and altogether remains under the press about twenty-four hours. The cheese is then carried to a cool cellar, put into a tub containing pickle, the liquid covering the lower half of it. The water for the pickle is boiled, and about three or four handfuls of salt melted in about thirty imperial pints of water. The cheese is not put in until the water is quite cold. After remaining twenty-four hours, or at most two days, in the pickle tub, where it is turned every six hours, the cheese, after being rubbed over with salt, is placed upon a board slightly hollowed, having a small channel in the center to conduct the whey which runs off into a tub placed at the one end. This board is called the *Zouttank*, upon which several cheeses are placed at a time. About two or three ounces of the large chrstalized salt is placed upon the upper side of the cheese, which is frequently turned, the side uppermost being always sprinkled with salt. It remains on the zouttank about eight or ten days, according to the warmness of the weather; the cheese is then washed with hot water, rubbed dry and laid upon planks, and turned daily until perfectly dry and hard.

The cheese house is generally shut during the day, but must be open in the evening and early in the morning.

Gouda is the principal market for this kind of cheese, where it sells at about 35s. per cwt.

Each cow at grass in Holland is calculated to give about three or four pounds sweet milk cheese per day.

We omit the method of making the *Kanter Cheese*, which is similar to our skim-milk cheese—and of the cheese utensils.

The milk houses are generally between the dwelling and the cow-house, in a square apartment, in a corner of which is the cooler; it is airy, roomy, and paved with square bricks—the upper part serving for churning, making cheese, &c. and descending a few steps, into a sort of cellar, is the milk room, having two to four windows, which are opened or shut according to circumstances.

The cheese houses are also generally cellars, kept clean and well ventilated.

The Dutch are remarkably particular as to the quantity and quality of their salt, of which there are three kinds manufactured; and it is this, our reporter thinks, which is the principal cause of the sweet and delicious flavor of their butter, which, although well flavored, hardly tastes of salt, or rather of that acrid quality which is perceptible in the butter of Great Britain.

Cleanliness governs in all the Dutch dairies. Every dwelling-house is a model and a pattern. They seem to vie with each other on this point. The cow house is pure and clean, not a particle of filth being seen in it; the cows, says Mr. M., are as clean as if they were in a dining room; the milk and cheese houses, and in short every part of the house, are free from dirt and dust of any kind. The whole apartments, even the byre (stalls) and hay house, are generally under one roof; and the cleanly system, and the admirable arrangement, give that comfort and pleasure which are too often wanted in other countries.

* For the article here referred to, see Gen. Far. vol. 5, p. 142.

Laying down Spring Butter.

This important article in every family is considered best, even for winter use, if made in May and June. A lady of my acquaintance is obliged to put on her table the greater part of her churnings; yet she continues to lay down a great deal of her winter's butter during these months. As soon as each portion of the churning, however small, is put in the firkin or jar, brine is poured on to keep it from the air. Her butter is excellent.—*N. Y. Farmer.*

A Philadelphia paper says—"The peaches are done for in Maryland. The cold weather froze up the buds, and all vitality left them."